



1     CLAIMS 12 THROUGH 29 ARE NOT OBVIOUS IN VIEW OF THE CITED ART

2             The Examiner rejected Claims 1 through 3 under 35 U.S.C. §103(a), as being obvious in  
3     view of U.S. Patent No. 4,873,965 to Danieli (the "Danieli patent" or "Danieli") or in view of the  
4     Danieli patent and U.S. patent No. 5,752,912 to Takahashi et al. (the "Takahashi patent" or  
5     "Takahashi"). The Applicant respectfully submits that the claims as amended are not obvious  
6     over the cited references and are entitled to allowance.

7             New independent Claims 12 and 23 are both directed to a device having a flexible shaft  
8     and at least two pulling and/or pushing elements extending within the flexible shaft. Both  
9     independent claims also include a fixing device that alternatively fixes the pulling and/or pushing  
10    elements in place or allows them to move freely through the fixing device. The importance of  
11    this fixing structure is that it allows the pulling and/or pushing elements to be released so that a  
12    user can manually bend the shaft to the desired form. Once the shaft is manually bent to the  
13    desired form, the fixing device may be placed in the locked position to fix the pulling and/or  
14    pushing elements in place, thereby fixing the shaft in the particular form.

15            This operation of the device is set out in method Claim 28. Claim 28 requires placing the  
16    pulling and/or pushing elements in a condition in which they are freely movable axially at the  
17    proximal end of the shaft and bending the shaft to a desired longitudinally bent shape. With the  
18    shaft in the desired bent shape, element (b) of Claim 28 requires placing the pulling and/or  
19    pushing elements in a condition in which they are in a fixed position prevented from moving  
20    axially at the proximal end of the shaft to fix the shaft in the desired bent shape. Element (c) of  
21    Claim 28 then requires inserting the shaft into an inserted position in an orifice while the pulling  
22    and/or pushing elements are in the fixed position fixing the shaft in the desired bent shape.  
23    Elements (d) and (e) of Claim 28 require then placing the pulling and/or pushing elements in the  
24    condition in which they are freely movable axially at the proximal end of the shaft, and moving

1 the shaft from the inserted position in the orifice while the pulling and/or pushing elements are in  
2 the condition in which they are freely movable axially at the proximal end of the shaft.

3 This fixing arrangement for the pulling and/or pushing elements and the cooperation of  
4 the fixing arrangement and pulling and/or pushing elements is in contrast to the device and its  
5 operation shown in the Danieli patent. The Danieli device comprises an endoscope which is  
6 adapted to be manipulated to different shapes by the operation of controls at a control end of the  
7 device. In particular, the control wires in the device are each connected to a chain which meshes  
8 with a gear wheel. The gear wheel is rotated one direction or another to control the position of  
9 the control wires and thus control the shape of the endoscope shaft. Danieli does not teach or  
10 suggest the fixing device set out in Claims 12 and 23. Danieli also does not teach or suggest the  
11 method set out in Claim 28 because it does not suggest any way to allow the control wires to  
12 move freely to enable the shaft to be bent either to form the desired shape or to allow the shaft to  
13 be withdrawn from an orifice in which it is used.

14 The Applicant notes the comment in the Office Action that it is well known to include  
15 braking or locking devices. However, absent any specific teaching or suggestion in the prior art  
16 of the specific fixing arrangement required in the present apparatus claims and the method steps  
17 set out in the method claims, the Applicant submits that the obviousness rejection is improper.

18 The Takahishi patent does not make up for the deficiencies of the Danieli patent with  
19 respect to the fixing device at the proximal end of the device shaft. In fact Takahishi shows a  
20 control system very similar to that shown in Danieli with no way to detach the control wires so  
21 that they may move freely axially at the proximal end of the endoscope shaft.

22 Because the Danieli patent, either alone or in view of Takahishi, does not teach or suggest  
23 all of the features required in independent Claims 12, 23, and 28, the Applicant submits that  
24 those claims are entitled to allowance together with their respective dependent claims.

1     CONCLUSION

2             For all of the above reasons, the Applicant respectfully requests consideration and  
3     allowance of new Claims 12 through 29.

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1 If the Examiner should feel that any issue remains as to the allowability of these claims,  
2 or that a conference might expedite allowance of the claims, he is asked to telephone the  
3 undersigned attorney.

4 Respectfully submitted,

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